

**REMARKS**

Claims 1-7 are pending in this application. Non-elected claims 3, 4, and 6 are withdrawn from consideration by the Examiner. By this Amendment, claim 7 is added. Support for new claim 7 may be found, for example, in the specification at paragraph [0038]; and in the original claims.

In view of the foregoing amendments and following remarks, reconsideration and allowance are respectfully requested.

**I. Rejections Under 35 U.S.C. §103**

The Office Action, under 35 U.S.C. §103(a), rejects:

- (1) Claims 1 and 2 under 35 U.S.C. §103(a) as having been obvious over JP09-276708 to Yoshinori et al. ("Yoshinori") in view of U.S. Patent No. 3,959,520 to Hoyer et al. ("Hoyer"); and
- (2) Claim 5 under 35 U.S.C. §103(a) as having been obvious over Yoshinori in view of Hoyer, and further in view of U.S. Patent No. 5,459,119 to Abe et al. ("Abe").

Applicants respectfully traverse the rejections.

Claim 1 is directed to a filter catalyst comprising a catalytic layer formed on a surface of a catalyst-support substrate, where the filter catalyst being characterized in that an SEM photograph on a cross section of the filter catalyst is turned into electronic data so that, in an image being turned into electronic data, a ratio of a number of pixels forming an outer periphery of the catalytic layer to a number of pixels forming the catalytic layer is 0.5 or more; and where forming the catalytic layer comprises removing excess slurry by repeating a pressure fluctuation at both ends of the catalyst-support substrate. The applied references would not have rendered obvious the claimed filter catalyst for at least the following reasons.

The Office Action asserts that Yoshinori allegedly discloses each element of claim 1, except the recited ratio of a number of pixels forming an outer periphery of the catalytic layer to a number of pixels forming the catalytic layer. See page 2. The Office Action further asserts that the recited ratio of the number of pixels is a result effective variable and is not critical to the claimed filter catalyst. See page 3. The Office Action further asserts that it would have been obvious to combine Hoyer, which allegedly teaches removing excess catalyst slurry from a honeycomb surface by blowing pressurized air through the surface, to arrive at the claimed filter catalyst. See page 4. Applicants respectfully disagree.

The recited ratio of the number of pixels is critical for the catalytic layer to be formed uniformly on the surface of the catalyst-support substrate. See specification at paragraph [0039]. The catalytic layer formed uniformly on the surface of the catalyst-support substrate results in a filter catalyst having ventilation holes with sufficient opening amounts. *Id.* Additionally, the recited ratio of the number of pixels could not have been a result effective variable because the applied references do not disclose analyzing pixels of an SEM photograph of a filter catalyst, much less the relationship between a ratio of the number of pixels and uniformity of a catalytic layer formed on a catalyst-support substrate. Thus, the applied references do not disclose that the ratio of the number of pixels is a result-effective variable and the recited ratio could not have been obtained by routine experimentation. See MPEP §2144.05(II)(B) (stating that a "particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation").

Furthermore, Yoshinori and Hoyer fail to disclose or suggest removing excess slurry by repeating a pressure fluctuation at both ends of a catalyst-support substrate. Instead, both Yoshinori and Hoyer teach removing excess slurry by a "blowing and drying" method, which

is completely different from removing excess slurry by pressure fluctuation at both ends of the catalyst-support substrate. See Yoshinori, Abstract; at paragraphs [0015] and [0024]; Hoyer, Abstract; and specification at paragraph [0060]. Thus, neither Yoshinori nor Hoyer discloses or suggests removing excess slurry by repeating a pressure fluctuation at both ends of the catalyst-support substrate.

For at least these reasons, the applied references would not have rendered obvious claim 1, and its dependent claims. Accordingly, reconsideration and withdrawal of the rejections are respectfully requested.

## **II. New Claim**

By this Amendment, new claim 7 is presented. Claim 7 is directed to a filter catalyst comprising a catalytic layer formed on a surface of a catalyst-support substrate, where a ratio of an outer peripheral length of the catalytic layer in the cross section of the filter catalyst to a cross-sectional area of the catalytic layer is 0.5 or more. The applied references do not disclose or suggest such claim features. Accordingly, examination and allowance of claim 7 are respectfully requested.

## **III. Rejoinder**

Applicants respectfully request rejoinder of non-elected claims 3 and 6. This application is subject to unity of invention practice as set forth in PCT Rule 13. See MPEP §1893.03(d). Because claims 3 and 6 are substantially coextensive with independent claims 1 and 7, they share at least one special technical feature with claims 1 and 7. Thus, unity of invention exists between all the claims. Applicants respectfully request withdrawal of the Restriction Requirement and rejoinder of claims 3 and 6.

**IV. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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